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ESTIMATED U.S. PETROLEUM BALANCE

SUMMARY

Total domestic petroleum products supplied declined 812 MBD (5.2%) in November compared with last year. Gasoline supplied levels were 1% ahead of last year; the overall decline in domestic petroleum products is due entirely to continued lower levels of fuel oils supplied.

Total domestic crude production showed a slight increase over last year. Lower domestic product demand reduced the need for imports with continuing favorable impact on the merchandise trade balance. The pickup in rig activity continued; November well completions were 4% less than last November and have declined more than 20% from the May high when seasonally adjusted. Inventories for all products appear adequate.

PRODUCTS SUPPLIED[1/]

The rate of gasoline supplied in November was 66 MBD (1.0%) ahead of last year but, for the year to date, was marginally below last year's level (down 33 MBD -- 0.5%). Despite the almost uninterrupted decline in pump prices since early 1981 — about 24¢ (18%) adjusted for inflation — and higher levels of real disposable personal income, demand has not picked up. The long-term effect of the substantial price increases of 1979 and 1980 appears to be offsetting shorter-term price and income effects.

The rate of increase in unleaded's market share over last year is still considerably below that formerly experienced. November's share stands at 55.5%, an advance of about 3½ percentage points over last November, roughly half the yearly rate of increase in prior years.

In November, distillate supplied levels were 447 MBD (15.5%) below a year earlier. While, countrywide, the weather was warmer than last year, there were significant regional differences. In PADD I, for example, the weather was about 15% warmer than last year, while in PADD II, there was little change from a year ago. Overall, we estimate that the weather effect accounted for about 11% (roughly 50 MBD) of the year-to-year decline. Lower truck and railroad freight traffic, indicated to be down roughly 10% versus last year, is estimated to have caused a decline of about 100 MBD, or close to one-quarter of the total deficit. Industrial activity and other sectors contributed about 18% of the decline or 80 MBD. Part of the remaining deficit of more than 200 MBD is undoubtedly the result of continued hesitancy on the part of distributors to replenish inventories. However, cumulative 11 month data tend to equalize swings in purchase patterns by these holders of secondary storage. This leads to the conclusion that the long-term effect of 1979/1980's substantial price rises also contributed to the November deficit.

The year-to-year declines in the level of residual fuel oil supplied, now spanning a period of almost four years, continued in November. The 420 MBD (22.0%) November drop continues to reflect the long-term effect of the substantial price increases in 1979 and 1980 and resultant conservation and fuel switching, as well as the drawn-out slump in the economy. The extent of fuel switching can be readily seen in examining fuel sources used by electric utilities. For the first eight months of 1982, oil represented less than 8% of total energy input, compared with more than twice that share in 1978. Coal, on the other hand, rose from 42% to 52% of total input. In addition, industrial production is almost 9% behind last October; about one-fifth of total residual fuel oil is used in industrial applications (other than at utilities). A price advantage held by bunker fuels over foreign postings until spring of last year was lost and petroleum shipping activity worldwide has been reduced substantially, producing a substantial decline in bunker fuels laden on foreign and domestic vessels. For the period April through September 1982, such fuel sales declined 80 MBD (19%) versus the corresponding prior-year period.

On a year-to-date basis, kerosine jet was supplied at 1.5% below last year's rate. "Miles flown" decreased about 2% for the year to date compared with last year. However, revenue passenger miles increased about 4%, as larger capacity planes continued to enter the fleet and load factors rose.

(In millions of B/D)	NOVEMBER ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1982	1981	% Change	1982	1981	% Change
—Total domestic products supplied	14.8	15.6	(5.2)	15.2	16.0	(4.8)
—Motor gasoline supplied	6.4	6.4	1.0	6.5	6.6	(0.5)
—Distillate fuel oil supplied	2.4	2.9	(15.5)	2.7	2.8	(4.7)
—Residual fuel oil supplied	1.5	1.9	(22.0)	1.7	2.1	(18.7)

SUPPLY[1/]

Total supply declined 680 MBD as a result of a 388 MBD decline in imports and a 292 MBD decrease in total domestic supply.

Total domestic crude production rose 52 MBD (0.6%) over November 1981 as a result of production from the Kuparuk field, on stream since last December, which helped to lift Alaskan production about 50 MBD over last November's level, offsetting a 40 MBD decline in other Alaskan production. Lower 48 production stayed about the same this November as last year; this is also true for the year to date.

Imports posted a 388 MBD (6.9%) decrease versus last November. The steady decline in petroleum imports, combined with expanding exports, has had a substantial impact on the U.S. merchandise trade balance. For the first 10 months of 1982 total petroleum imports fell more than $15 billion to about $53 billion dollars, as average costs declined by more than $3 per barrel. Roughly two-thirds of the decreased import costs is the result of lower volume, the remainder due to lower unit costs. During the same time span, petroleum exports rose from $3 billion to $5 billion. The combined effect on the merchandise trade balance was more than 17 billion dollars. Had this not occurred, the merchandise trade deficit for 10 months would have been some 50% more. Sources of petroleum imports have also changed drastically over the past several years. During the mid-seventies, about 70% of imports originated in OPEC countries. In September of 1976 and 1977, for example, imports from OPEC countries reached 72% and 69%, respectively. The September 1982 figure was about 36%.

Total inventories rose 10 million barrels during November and are at adequate levels considering reduced demand and the continuing substantial level of crude oil stocks. Gasoline inventories are equal to about 36 days of supply, at the high end of the 29 to 40 day November range. Distillate production during November was almost 200 MBD higher than a year ago. As a result of relatively high production rates and lower demand, distillate inventories have been rising, increasing by about 15 million barrels during November compared with only minor upward moves historically. They are at an adequate level considering the flexibility afforded by ample crude inventories and substantial unused refining capacity.

The number of active rotary rigs has risen uninterruptedly since mid-October and is now about 4% above the recent-year monthly low set in October. However, adjusted for seasonal variation, it is still about 45% below its January 1982 peak. While reported well completions rose from prior-month levels, the year-to-year decline that started in September continued, as well completions reported declined about 4% against last November and, seasonally adjusted, more than 20% from its May high. The general trend of the two data series since their respective peaks tends to corroborate prior experience that there is a lag of several months between major changes in the rig count and changes in reported well completions. The seismic crew count, a longer-term indicator of drilling activity, also declined in November, falling more than 31% from a year ago.

(In millions of B/D)	NOVEMBER ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1982	1981	% Change	1982	1981	% Change
—Total supply	15.9	16.6	(4.1)	15.7	16.5	(4.9)
—Crude production[2]	8.6	8.6	0.6	8.7	8.6	1.1
—Crude oil imports[3] [4]	3.6	3.9	(8.8)	3.4	4.2	(19.6)
—Product imports	1.6	1.7	(2.7)	1.5	1.6	(3.5)

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ Beginning with January 1977, the U.S. Department of Energy began reporting crude oil imports as of the date of importation. Previously, this data, with the exception of Canadian crude imports, was reported as of the date it was received at the refinery. This change may affect both the level of crude oil imports and crude oil stocks. API estimates of these data may, therefore, differ slightly from those of the U.S. Department of Energy.

4/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 290 million barrels as of November 30, 1982).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Supply/Products Supplied From Primary Storage	NOVEMBER			YEAR-TO-DATE		
	1982[1]	1981[2]	% Change	1982[3R]	1981[2]	% Change
Products Supplied:						
Motor gasoline	6,439	6,373	1.0	6,546	6,579	(0.5)
Unleaded motor gasoline*	3,572	3,315**	7.8	3,524	3,389**	4.0
Naphtha-jet	181	195	(7.2)	205	200	2.5
Kerosine-jet	837	787	6.4	798	810	(1.5)
Kerosine	138	153	(9.8)	123	120	2.5
Distillate fuel oil	2,433	2,880	(15.5)	2,661	2,793	(4.7)
Residual fuel oil	1,489	1,909	(22.0)	1,685	2,073	(18.7)
All other oils[4]	3,599	3,636	(1.0)	3,553	3,706	(4.1)
Reclassified[5]	- 331	- 336	(1.5)	- 328	- 269	21.9
Total domestic products supplied	14,785	15,597	(5.2)	15,243	16,012	(4.8)
Exports	800	701	14.1	800	589	35.8
Total products supplied	15,585	16,298	(4.4)	16,043	16,601	(3.4)
Supply:						
Domestic production:						
Crude oil[6]	8,638	8,586	0.6	8,663	8,570	1.1
Natural gas liquids	1,591	1,630	(2.4)	1,542	1,610	(4.2)
Other supply[7]	482	787	(38.8)	551	510	8.0
Total domestic supply	10,711	11,003	(2.7)	10,756	10,690	0.6
Imports:						
Crude oil, total 11/	3,556 10/	3,898 10/	(8.8)	3,382 10/	4,207 10/	(19.6)
Canadian	181	184	(1.6)	199	161	23.6
Other	3,375	3,714	(9.1)	3,183	4,046	(21.3)
Products, total	1,649	1,695	(2.7)	1,533	1,589	(3.5)
Residual fuel oil	749	880	(14.9)	737	789	(6.6)
Other	900	815	10.4	796	800	(0.5)
Total imports	5,205	5,593	(6.9)	4,915	5,796	(15.2)
Total supply	15,916	16,596	(4.1)	15,671	16,486	(4.9)
Stock change, all oils	+ 331	+ 298	XXXX	- 372	- 115	XXXX
Refinery Operations						
Input to crude oil distillation units	12,169	12,584	(3.3)	12,205	12,756	(4.3)
Operable capacity	16,663	18,449	(9.7)	17,471	18,625	(6.2)
Refinery utilization (%)[8]	73.0%	68.2%	7.0	69.9%	68.5%	2.0
Crude oil runs	11,775	12,240	(3.8)	11,802	12,482	(5.4)

Stocks (millions bbls.)	1982		1981[2]	% Change from . . .	
	Nov. 30[9]	Oct. 31[9]	Nov. 30	Previous Month	Year Ago
Crude oil 10/	349.3	349.6r/	366.0	(0.1)	(4.6)
Unfinished oils	109.1	111.5	116.4	(2.2)	(6.3)
Motor gasoline	229.3	232.2r/	248.4	(1.2)	(7.7)
Naphtha-jet	6.4	6.1	6.7	4.9	(4.5)
Kerosine-jet	34.6	34.5r/	35.3	0.3	(2.0)
Kerosine	10.9	10.7	12.3	1.9	(11.4)
Distillate fuel oil	186.3	171.1r/	200.1	8.9	(6.9)
Residual fuel oil	64.9	61.0r/	81.4	4.9	(21.4)
All other oils	139.0	142.2r/	212.4	(2.3)	(34.6)
Total all oils	1,128.9	1,118.9r/	1,279.0	0.9	(11.7)

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-September, U.S. Department of Energy, October-November, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
11/ Based on refinery receipts of foreign crude oil.
R/ Revised.
* Included in motor gasoline.
** Differs slightly from U.S. Department of Energy figures since API uses refinery shipments to calculate demand.